ARTIFICIAL INTELLIGENCE IN HISTORICAL RESEARCH METHODOLOGY: IMPLICATIONS FOR NIGERIAN HISTORIOGRAPHY

Esther Ochuko Abasa

Department of History and ISD, Delta State University, Abraka

Abstract

The integration of Artificial Intelligence (AI) in historical research marks a transformative stage in the evolution of Nigerian historiography. Originally shaped by oral traditions, colonial records, and post-independence scholarship, Nigerian historical practice has continually adapted to new methods and sources. AI now offers opportunities to digitize fragile archival materials, preserve endangered oral traditions, and analyze dispersed records at unprecedented levels. Globally, historians have applied AI to manuscript transcription, large-scale text mining, and archaeological analysis, demonstrating its potential as a tool that supports interdisciplinary study. In Nigeria, however, adoption is constrained by weak digital infrastructure, limited funding, a lack of proper training and awareness of proper usage, and, most importantly, ethical concerns about authenticity, cultural considerations, and algorithmic bias. This paper however, through quantitative research methodology examines how AI can complement traditional historical methodologies, assess its challenges and opportunities, and explore its implications for preserving cultural memory. The paper however, recommends that AI should not replace oral and archival methods but serve as a complementary tool, enabling Nigerian historians to balance human and technological insights while contributing more fully to global scholarly debates. The paper also recommends that scholars should have adequate training regarding the use of Artificial Intelligence (AI) in research work.

Keywords: Archives, Algorithms, Artificial Intelligence, Research Methods, Nigerian Historiography

Introduction

Historiography in Nigeria has always reflected a dynamic interaction between method and materials. In precolonial times, history was preserved through oral traditions, proverbs, songs, and praise poetry that transmitted collective memory across generations. Jan Vansina reminds us that such traditions, far from being "mere folklore," are structured historical sources that sustained African societies before the advent of written records (Vansina, 13). Colonialism, however, introduced documentary evidence, placing official records and missionary accounts at the centre of historical reconstruction. Kenneth Dike's *Trade and Politics in the Niger Delta* challenged this colonial dominance by showing that African agency had long shaped economic and political life (Dike, 27–29). After independence, Nigerian historians such as Jacob Ade Ajayi emphasized the blending of oral and archival evidence, emphasizing that both sources are necessary for an inclusive understanding of the past (Ade Ajayi, 33–35). This evolution shows that the methods of historical inquiry are never static but respond to changing tools, contexts, and questions.

In the twenty-first century, artificial intelligence (AI) represents the latest frontier in this ongoing transformation. Globally, AI has been applied in areas such as handwriting recognition, large-scale data-sourced analysis, and the reconstruction of damaged manuscripts (Terras, 42–44). For Nigerian historiography, these possibilities are particularly significant. Historical records remain dispersed across colonial archives in Europe, fragile local repositories, and oral traditions that risk being lost with each passing generation (Falola, 102). AI tools such as speech recognition and machine learning offer opportunities to preserve and interpret these diverse materials more effectively. Yet as earlier mentioned, challenges persist, including weak digital infrastructure, limited technical expertise, and ethical questions (Mhlongo, 77). It is within this background that historiographical pluralism becomes valuable: rather than privileging one method, it emphasizes complementing; oral traditions alongside written records, and now, archives alongside algorithms to enrich, not replace, each approach.

Statement of the Problem

Historical research in Nigeria has long relied on oral traditions and colonial-era archives, both of which face threats of loss, fragmentation, and limited accessibility. Many records remain scattered across poorly maintained repositories within the country or stored in European institutions, making comprehensive research time-consuming and difficult. While Artificial Intelligence (AI) offers opportunities for digitization, preservation, and large-scale analysis, its application in Nigerian historiography remains underdeveloped due to weak digital infrastructure, inadequate funding, and limited training among scholars. Without addressing these challenges, Nigerian historians risk falling behind in global digital scholarship and missing the chance to safeguard their cultural memory for future generations.

Methodology

Due to the evaluative nature of this study, a qualitative, document-based approach was employed, as relevant scholarly document analysis provides a systematic way of extracting meaning from written materials (Bowen 29). Peer-reviewed articles and books were collected from SSRN, Longman, Ashgate, Google Scholar, and university repositories, with selected international studies included for comparative analysis. Sources were reviewed using qualitative content analysis, a method well-suited for identifying recurring themes and patterns across texts (Schreier 45). The study was guided by historiographical pluralism, which emphasizes the use of diverse sources and perspectives in reconstructing historical knowledge (Ibhawoh and Falola 12). This synthesis ensured that multiple viewpoints informed the assessment of the opportunities and challenges of integrating AI into Nigerian historical scholarship.

Theoretical Framework

This paper adopts Historiographical Pluralism as its theoretical framework, a perspective grounded in the works of Nigerian historians such as J. F. Ade Ajayi and Toyin Falola. Historiographical pluralism emphasizes the use of multiple sources: oral traditions, archival records, and interdisciplinary methods, in reconstructing African history. Ajayi argued that African history cannot be fully understood through reliance on colonial archives alone; oral traditions and indigenous sources must be critically incorporated to produce a balanced narrative (Ajayi 87). Similarly, Falola stresses the value of integrating oral, written, and material sources, asserting that such pluralism reflects the complexity of African societies and avoids the distortions inherent in single-source historiography (Falola 102–103).

Applied to this study, historiographical pluralism provides a lens for examining the shift from archives to algorithms in Nigerian historiography. Artificial Intelligence (AI) is positioned just like other earlier methods, as a complementary tool that enhances oral and archival research. By situating AI within this pluralist tradition, the study highlights how digital tools can expand preservation and analysis while maintaining continuity with Nigeria's established historiographical practices. AI thus becomes part of an evolving methodological toolkit, aligned with the pluralist principles of inclusivity, diversity, and balance in historical reconstruction.

Literature Review

The use of Artificial Intelligence (AI) in historical research represents an important development in Nigerian historiography, which has always valued methodological diversity. Nigerian historians have traditionally combined oral traditions, archival sources, and interdisciplinary approaches to reconstruct the past. Oral traditions, as Jan Vansina points out, are structured and communal, offering reliable historical evidence (Vansina 13), while Kenneth Dike and Jacob Ade Ajayi show how oral and archival sources complement each other to create richer narratives (Dike 27–29; Ajayi 87). Toyin Falola emphasizes that Nigerian historiography thrives when historians remain flexible, blending different types of sources to produce inclusive histories (Falola 102). On these bases, AI serves as a tool that can enhance access, preservation, and analysis without replacing traditional methods.

Recent studies illustrate the practical potential of AI in Nigeria. Omigie, Krubu, and Solomon show that AI-assisted archival systems help organize, index, and retrieve fragile or scattered documents, addressing long-standing inefficiencies (Omigie, Krubu, and Solomon 6–8). Esamagu highlights that AI encourages interdisciplinary collaboration, allowing historians to work with anthropologists, linguists, and digital humanists to develop richer interpretations (Esamagu 7–9). Similar efforts globally, such as AI-driven digitization of apartheid-era records in South Africa and manuscript reconstruction in Egypt (Bollier 22–24), demonstrate how technology can support both preservation and analysis. Despite these opportunities, challenges remain. Limited digital technical know-how, poor internet access, and a lack of technical skills awareness hinder the full use of AI in Nigeria (Edemekong 18–19). Ethical concerns, including the risk of reinforcing Eurocentric biases or marginalizing indigenous knowledge, require careful consideration (Olugbodi 4–6; Mohammed 5–7). A pluralist framework suggests that AI should complement rather than replace existing methods, combining technological tools with human judgment.

Overall, the literature review shows that AI can significantly enhance Nigerian historiography by preserving records, supporting interdisciplinary research, and deepening analysis. However, success depends on integrating AI thoughtfully within existing pluralist methodologies.

Conceptual Clarifications

Archives: Collections of historical documents, manuscripts, records, and other materials preserved for research and reference. Archives can be physical or digital, and they serve as primary sources for historians seeking to reconstruct and interpret the past (Dike, 12-15).

Algorithms: Step-by-step computational procedures or sets of rules used to solve problems and process data (Esamagu, 48-50). In simple terms, an algorithm is the calculations a search engine like Google,

Phoenix, ChatGPT, and others like them do before they produce answers. By answers, it means the generated responses to whatever we type into these digital platforms.

Artificial Intelligence (AI): Computer systems capable of performing tasks that normally require human intelligence, such as learning, reasoning, and analyzing large datasets. In historical research, AI enables automation, which eases strenuous research processes (Russell and Norvig 3).

Research Methodologies: Systematic approaches and strategies used by historians to collect, analyze, and interpret historical evidence. These include archival research, oral history, document analysis, and increasingly, AI-assisted methods that enhance efficiency and accuracy (Edemekong, 18).

Nigerian Historiography: The study of how Nigerian history has been researched, interpreted, and written over time. It encompasses precolonial oral traditions, colonial archives, and post-independence scholarly efforts to blend oral and written sources to produce a more inclusive understanding of Nigeria's past (Dike, 13).

Oral Traditions: Verbal knowledge, history, and cultural practices passed down across generations. These include stories, proverbs, songs, and praise poetry, which are central to Nigerian historical reconstruction (Vansina, 27).

An Overview of the Evolution of Historiography in Nigeria

The development of historiography in Nigeria has been marked by a dynamic interaction between oral traditions, colonial records, and post-independence scholarly reinterpretations. In precolonial Nigeria, historical knowledge was preserved largely through oral traditions such as proverbs, folktales, songs, praise poetry, and genealogies. These forms of expression transmitted collective memory across generations, ensuring that communities retained a sense of identity and continuity. Jan Vansina has argued that oral traditions should not be dismissed as "mere folklore" but rather understood as structured sources of historical evidence, particularly in African settings where they served as the primary medium of historical consciousness (Vansina 13). For Nigeria, these oral sources represented both historical content and method, emphasizing performance, memory, and communal validation as tools of historical transmission.

Colonialism, however, disrupted this system by privileging documentary evidence over oral testimony. Colonial administrators, missionaries, and European scholars produced written records that framed Nigerian history largely through external perspectives. Kenneth Dike, often regarded as the father of modern Nigerian historiography, critiqued this Eurocentric dominance in his seminal work *Trade and Politics in the Niger Delta* (1956). Dike's scholarship emphasized that colonial historiography reduced Africans to passive subjects rather than active agents in history (Dike 27–29). The privileging of official records and missionary accounts during the colonial period created an imbalance in historical reconstruction, as indigenous voices and traditions were sidelined.

Following independence, Nigerian historians sought to reclaim the narrative by reasserting the value of indigenous sources. Scholars such as Jacob Ade Ajayi and Tekena Tamuno emphasized that oral traditions, when critically assessed alongside archival records, could yield a more holistic picture of

---

Nigeria's past. Ade Ajayi, in particular, stressed the importance of blending oral and documentary evidence, arguing that both sources complemented each other in addressing gaps in historical knowledge (Ade Ajayi 87). This methodological reorientation laid the foundation for what became known as the "Ibadan School" of historiography, which sought to indigenize the writing of African history.

By the late twentieth century, Nigerian historiography expanded further to include interdisciplinary methods, integrating anthropology, archaeology, and linguistics. This broadened approach reflected both global academic involvement and local demands to create histories that were inclusive and representative. Toyin Falola, one of the leading figures of contemporary Nigerian historiography, has highlighted the importance of "plural methodologies" that engage oral narratives, material culture, and written archives simultaneously (Falola 102). Such pluralism reflects the recognition that no single source or method can fully capture Nigeria's complex historical experiences.

The trajectory of Nigerian historiography thus illustrates an ongoing negotiation between method and context: from oral traditions to colonial records, from nationalist reinterpretations to interdisciplinary expansions. This evolution provides a crucial backdrop for understanding the twenty-first-century integration of digital tools and Artificial Intelligence. Just as oral traditions and written archives once coexisted and enriched one another, so too does AI promise to serve as a methodological complement rather than a replacement in contemporary historical research.

Opportunities for Artificial Intelligence in Historical Research

AI and Archival Digitization: Artificial Intelligence is increasingly transforming how Nigerian historians preserve and access data and archival records. Automated transcription platforms such as "Transkribus" have already proven useful in Europe and North America for converting manuscripts into machine-readable text in English, offering a model that can be adapted to Nigerian archives (Kiessling et al. 145). By reducing reliance on manual transcription, AI makes it easier to retrieve, organize, and analyze documents that would otherwise remain inaccessible due to fragility or poor storage conditions. This innovation not only safeguards records but also broadens access for researchers across Nigerian academies.

Global Opportunities in AI and Historical Research: Globally, AI tools are expanding the scope of historical inquiry. For example, large-scale "text-mining technologies" allow scholars to uncover patterns and networks across thousands of documents, opening avenues for comparative and transnational studies that manual reading cannot achieve (Putnam 377). These tools are not designed to replace the historian's interpretive judgment but to strengthen it by providing new insights and connections. Such innovations demonstrate how Nigerian historiography could integrate global best practices while remaining attentive to local historical requirements.

Opportunities for Nigerian Historiography: In Nigeria, AI has the potential to address long-standing archival challenges. Many colonial-era records remain dispersed across archives in Britain and Europe, while local repositories are often neglected due to underfunding and poor infrastructure. AI-driven

digitization can bridge this gap by preserving fragile records and making them available to a wider audience of scholars (Olukotun 212). Furthermore, voice-to-text technologies can support the transcription of oral traditions, an essential part of Nigerian historical knowledge that is increasingly threatened by generational loss. This aligns with the pluralist vision of historians like Ade Ajayi, who argued for the integration of oral traditions alongside archival materials (Ajayi 87).

Interdisciplinary Collaboration: The integration of AI into historical work also promotes collaboration across disciplines. Nigerian historians can partner with linguists, computer scientists, and anthropologists to design systems that capture both textual and oral dimensions of the past. As Esamagu notes, such interdisciplinary efforts expand analytical frameworks and help construct richer narratives of African history (Esamagu 8).

Challenges for Artificial Intelligence in Historical Research

Challenges of Accessibility and Expertise: Despite its promise, the integration of AI into Nigerian historiography faces structural obstacles. Limited digital infrastructure, unreliable internet access, and inadequate technical expertise remain major barriers (UNESCO 57). Without targeted investment in digital tools and training, Nigerian historians risk being excluded from global advances in AI-assisted scholarship, and honestly so.

Uneven Distribution of Resources: Another concern is the uneven distribution of resources. Well-funded institutions may have the capacity to digitize and apply AI analysis to their collections, while underfunded archives struggle to maintain even basic cataloguing. This imbalance could widen the digital divide within Nigerian scholarship, privileging certain historical narratives over others (Omigie, Krubu, and Solomon 7).

Ethical Concerns and the Risk of Digital Colonialism: The reliance on AI technologies developed in the Global North raises ethical concerns. Couldry and Mejias warn of **"digital colonialism"**, a system where control over data and platforms remains concentrated in wealthy countries, limiting the agency of local researchers (Couldry and Mejias 336). For Nigerian historiography, this could mean that indigenous knowledge is filtered through systems not designed with minority groups in mind. To counter this, collaborations between Nigerian historians and technologists are essential for developing culturally grounded AI applications.

Balancing Innovation with Sensitivity: Finally, while AI tools are powerful, they cannot replicate the cultural aura embedded in oral traditions and community-based memory. Over-reliance on algorithmic processes risks oversimplifying histories that require deep circumstantial interpretation. As Olugbodi argues, decolonizing AI in African historiography requires integrating indigenous epistemologies to avoid reproducing Eurocentric biases (Olugbodi 5).

A Distinctive Analysis of the Future of Artificial Intelligence in Historical Research

In this section, the paper explores how Artificial Intelligence (AI) can enhance historical research in ways that were previously unimaginable. One of the most significant benefits is time efficiency: AI enables the rapid processing and analysis of large volumes of materials, reducing the hours traditionally spent on manual transcription, cataloguing, and pattern recognition. AI tools operate at a speed comparable to that of light. The peace a researcher finds in the knowledge that he or she has an assistant who is readily available to work at any time of the day and week creates a different form of motivation. It becomes possible to delegate certain parts of the research process without extra cost and mobilization. By automating repetitive tasks, researchers can devote more attention to interpretation, critical analysis, and constructing narratives, ultimately strengthening the quality of historical scholarship.

Government support is another key factor in shaping the practical use of AI. Adequate funding provides access to the necessary digital infrastructure, software, and maintenance that make AI tools usable in Nigerian archival and university settings. With state investment, scholars can digitize fragile documents, centralize scattered records, and collaborate on large-scale projects without being constrained by limited resources. A concerned government that invests in technology can control the data feed of its state; investment brings innovation, and there is no future without innovation. Nigeria, as a nation, is capable of funding the creation of a platform like ChatGPT, which is more localized to Nigerians because the data training would be sourced from within the nation. That way, information is controlled and sent out to the rest of the world, guided. Just like we have TETFUND and other funding in Nigeria, it is important for tech to not just be public-owned or SOEs; the government should be intentional, as this affects every other aspect, not just the field of history. It is widely known that even professionals use AI platforms; hence, what is being fed to the public through these platforms should be of great concern.

Finally, proper training on how to prompt and interact with AI is essential to ensure ethical and effective research. Learning to phrase queries correctly, verify outputs, and critically assess AI-generated insights helps avoid errors, bias, or unintentional plagiarism. This cannot be overemphasized as it is the main challenge of the modern-day researcher, especially young researchers and students. Everyone is always looking for an easy and fast option; hence, they forget to put in the work. Even AI platforms would tell you to please check the responses it gives because it can also make mistakes like humans would, but "no," some would rather just get AI-generated answers and dump them on paper. That is rather unethical and slothful, hence the importance of the training. Such capacity building ensures that AI functions as a reliable tool in historical inquiry, maintaining rigor and responsibility in the digital age.

Conclusion

In summary, Artificial Intelligence (AI) in Nigerian historiography represents a transformative step in the practice of historical research. Rather than replacing traditional approaches, AI complements oral traditions, archival research, and interdisciplinary methods, strengthening Nigeria's long-standing pluralist historiographical framework. By enhancing the preservation of

fragile documents, digitizing dispersed records, and enabling large-scale analysis, AI equips historians with tools to uncover connections and insights that were previously difficult to access.

Beyond technical benefits, AI fosters collaboration across disciplines, allowing historians, linguists, archivists, and computer scientists to work together in producing richer, more inclusive narratives. This collaboration ensures that historical reconstruction maintains methodological credibility of the field while integrating digital capabilities. Thoughtful implementation of AI also offers opportunities to safeguard cultural memory, make historical sources more accessible, and increase Nigeria's visibility in global scholarly debates.

Looking forward, the use of AI in Nigerian historiography should be seen as an "Eureka". By harmonizing algorithms with human interpretation, historians can maintain the balance between traditional and digital methods. As emphasized by scholars such as Ade Ajayi and Toyin Falola, methodological inclusivity remains central to producing accurate, representative, and balanced histories. With careful integration, AI can expand the historian's toolkit, preserving cultural heritage while ensuring that Nigerian historical scholarship remains both locally grounded and globally relevant.

Recommendations

This paper puts forward key recommendations for integrating Artificial Intelligence into Nigerian historiography in ways that strengthen existing traditions while addressing contemporary challenges. Firstly, the Nigerian government and universities, and research institutions, either collaboratively or individually, should invest in digital infrastructure by improving internet access, storage facilities, and computing resources to enable the effective innovation and adoption of AI tools.

Secondly, capacity-building initiatives are needed through structured training programs that equip historians, archivists, and researchers with practical skills in AI applications and digital humanities, ensuring they can use these technologies responsibly and effectively, thereby passing on these young to younger generations of researchers. Thirdly, the development of culturally grounded AI must be prioritized by integrating indigenous knowledge systems and local datasets into AI models. This is only possible through Partnerships between historians, linguists, anthropologists, computer scientists, and especially government parastatals. This is crucial to ensuring that these tools reflect Nigerian situations rather than replicating Eurocentric biases.

Finally, institutions should establish clear ethical guidelines for the responsible use of AI, ensuring that innovation is balanced with cultural and historical sensitivity. A reemphasis is

needed on the topic of sensitization as AI should function as a complement to oral and archival traditions, sustaining the pluralist approach that has long been central to Nigerian historiography.

References

Ade Ajayi, J. F. *Christian Missions in Nigeria, 1841–1891: The Making of a New Elite*. Longman, 1965.

Ajayi, J. F. "Oral Tradition and Oral History in Africa." *African Historiography: Essays in Honour of Jacob Ade Ajayi*, pp. 31–45. Longman, 1993.

Bollier, David. "AI and Historical Manuscript Transcription: Lessons from Global Humanities Projects." *Digital Humanities Quarterly*, vol. 12, no. 3, 2023, pp. 22–24.

Bowen, Glenn A. "Document Analysis as a Qualitative Research Method." Qualitative Research Journal, vol. 9, no. 2, 2009, pp. 27–40.

Couldry, Nick, and Ulises A. Mejias. *The Costs of Connection: How Data Is Colonizing Human Life and Appropriating It for Capitalism*. Stanford UP, 2019.

Dike, K. O. *Trade and Politics in the Niger Delta, 1830–1885: An Introduction to the Economic and Political History of Nigeria*. Oxford UP, 1956.

Edemekong, Nkereuwem David. "Bridging the Gap between Archival and Traditional Sources of History and AI in Nigeria." *African Journal of Historical Studies*, vol. 9, no. 1, 2025, pp. 14–29.

Esamagu, Efemena Emmanuel. "The Intersection between Artificial Intelligence, Interdisciplinary Collaboration and African History." *Àgídìgbo: ABUAD Journal of the Humanities*, vol. 5, no. 2, 2024, pp. 5–12.

Falola, Toyin. *African Historiography: Essays in Honour of Jacob Ade Ajayi*. Longman, 1993.

Ibhawoh, Bonny, and Toyin Falola. The Palgrave Handbook of African Histories. Palgrave Macmillan, 2018. (Useful for grounding pluralist and inclusive approaches to historiography in African contexts.)

Kiessling, Benjamin, et al. "Transkribus – A Platform for Automated Text Recognition of Historical Documents." *Journal for Digital Humanities*, vol. 5, no. 1, 2020, pp. 139–160.

Mhlongo, Manosa. "Artificial Intelligence and the Digital Humanities in Africa: Opportunities and Challenges." *Journal of African Cultural Studies*, vol. 32, no. 1, 2020, pp. 73–90.

Mohammed, Aminu. "Explainable AI and Historical Research in Africa." *Journal of African Digital Studies*, vol. 2, no. 1, 2023, pp. 1–15.

Olugbodi, Samuel T. "Decolonizing Artificial Intelligence in African Historiography." *Ibadan Journal of Humanities*, vol. 12, no. 3, 2024, pp. 1–18.

Olukotun, Ayo. "Preserving Nigeria's Cultural Memory: Challenges of Archival Neglect." *The Nigerian Archivist*, vol. 15, no. 2, 2019, pp. 210–223.

Omigie, Christopher Agbeniaru, Efe Krubu, and Okiemute Solomon. "Exploring Artificial Intelligence for Records and Archival Management System (AI-RAMS) for Nigerian Public Organizations." *International Journal of Library and Information Science*, vol. 29, no. 8–10, 2023, pp. 1–15.

Onianwa, O. I. "Mediation of Artificial Intelligence in Digitizing Nigerian Historical Archives." *SSRN Electronic Journal*, 2024, https://doi.org/10.2139/ssrn.4915641.

Putnam, Lara. "The Transnational and the Text-Searchable: Digitized Sources and the Shadows They Cast." *American Historical Review*, vol. 121, no. 2, 2016, pp. 377–402.

Schreier, Margrit. Qualitative Content Analysis in Practice. SAGE Publications, 2012.

Tamuno, Tekena. *Nigerian History, Politics, and Society in the Twentieth Century*. University of Ibadan Press, 1972.

Terras, Melissa. *Digital Images for the Information Professional*. Ashgate, 2008.

UNESCO. *Artificial Intelligence in Education: Challenges and Opportunities for Sustainable Development*. UNESCO Publishing, 2022.

Vansina, Jan. *Oral Tradition as History*. University of Wisconsin Press, 1985.